**REPORT:** FE-45-97

**RAILROAD:** Union Pacific Railroad Company (UP)

**LOCATION:** Boise, Idaho

**DATE, TIME:** Dec. 26, 1997, 5:45 p.m., MST

## **PROBABLE CAUSE:**

Crew Members did not clearly convey their intentions during radio transmissions for the movement of the train.

<b>EMPLOYEE:</b>	Craft	<b>Transportation</b>
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Activity..... Switching

Occupation ...... Conductor

Last Rules Examination...... May 2, 1997

Last Safety Training...... May 2, 1997

Last Physical Examination..... Feb. 22, 1991

## **Circumstances Prior to the Accident**

Following completion of a required off-duty period, the Conductor went on duty at 8:15 a.m. MT, on Dec. 26, 1997, at UP's Nampa, Idaho, Yard Office. The Conductor was part of a 3-person Crew comprising an Engineer, Conductor, and Brakeman. The Crew was called to work Assignment LIK 48-26. Crews given this assignment normally operated up to 12 hours and performed routine road switching operations on the Boise Subdivision. The Boise Subdivision was a single main track operated by Track Warrant Control (TWC). Prior to departing Nampa, the Conductor was observed by the Crew to be fit for duty.

The Crew performed various switching operations during the shift with no unusual occurrences. At approximately 5:30 p.m., the Crew began switching at the Croman Lumber Company. The train comprised two locomotives located on the west end and 26 freight cars to the east. The Engineer was positioned at the controls of the second locomotive UP 2358 which was facing east. The Brakeman was located approximately 400 feet east at a highway-rail grade crossing, which was blocked by the freight cars. The Conductor was positioned on the north side of the train at the switch clearance point to the Croman Lumber track. All communications were made

via radio transmission. The Conductor instructed movement of the train west. When eight cars destined for the lumber company reached the clearance point, the Conductor instructed the Engineer to stop. The intent was to uncouple the cars from the train and place them in the lumber company for loading. The Engineer stopped the train by making a train air brake application. At this time, the Brakeman requested that the train be moved an additional two car lengths west to clear the crossing and allow vehicular traffic to pass.

The Conductor's response was affirmative. According to the Brakeman, the Conductor said "We can do that," which the Brakeman thought meant immediately. Per his instructions, the Engineer released the brakes and moved the train an additional two car lengths west.

At the time of the accident, it was dusk, the sky was clear, and the temperature was about 27° F.

## The Accident

When the crossing was clear, the Brakeman told the Engineer to shove the train east so the Conductor could resume switching operations. The Engineer moved the train east, and after moving approximately four or five car lengths, brought the train to a stop. He attempted to contact the Conductor three or four times, but received no response. The Brakeman informed the Engineer he would walk toward the Conductor to determine the problem.

The Brakeman began walking the train and observed the Conductor lying between the rails under an empty wood chip car approximately two car lengths east of the switch. He notified the Engineer that the Conductor was hurt and asked the Engineer to call an ambulance. The Engineer turned his radio to a road channel and pressed the emergency button. The Dispatcher responded immediately. The Engineer then informed the Dispatcher of the accident and requested an ambulance and the police department.

The Ada County Sheriff's Department received notification at 6:03 p.m. The Fire Department's Paramedics arrived at the scene between 6:05 and 6:10 p.m., removed the Conductor from under the car, and began resuscitation efforts.

The Ada County Coroner arrived at 6:30 p.m. and pronounced the Conductor dead at the accident site.

(Please see the attached diagram of the Boise Subdivision to better visualize the accident scene and the chain of events that led up to the fatality.)

## **Post-Accident Investigation**

The Ada County Coroner performed an autopsy on the deceased Conductor. The Autopsy Report and the Certificate of Death stated the cause of death as "Multiple Traumatic Injuries." Mandatory Post-Accident Toxicological Testing of the deceased and other Crew Members was performed under the authority of 49 CFR Part 219, Subpart C. All test results were negative.

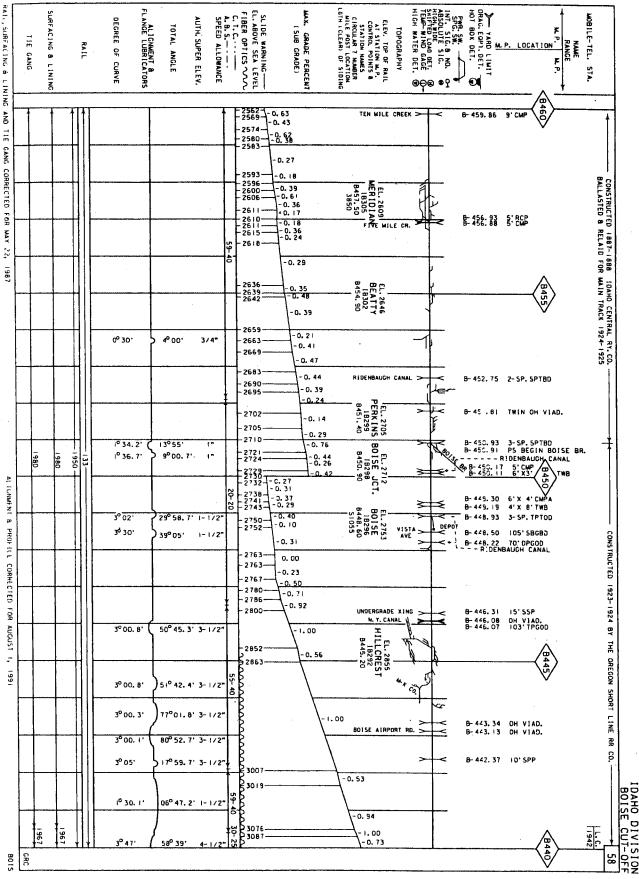
The railroad reported no damage to equipment as a result of the accident. The cars in the train consist were inspected by the UP Mechanical Department personnel, who found them free of defects and the safety appliances functioning as intended. Inspection of the freight car UP 147572 determined that the angle cock of the train line air brake system was turned, closing off the train air line. Further inspection revealed blood and body tissue on the outside of the L-3 wheel of the lead truck on the "A" end or east end of the car.

The footing in the accident area was a slightly raised, ballasted track bed. The tracks were clean of any material that would create a tripping hazard. There was no snow, and the ground was dry. The footwear which the Conductor was wearing at the time of the accident was examined, and nothing was found that could have caused or contributed to the cause of the accident.

A printout of the locomotive event recorder revealed that switching movements had been made at a speed of one to five mph.

Interviews with the Engineer and Brakeman indicated that radio procedures had not been followed when no specific distance was given by the Brakeman before a shoving move was executed, and the Engineer executed the move without receiving a specific distance.

Following the investigation, UP's Portland Service Unit issued Accident Prevention Alert No. 26, which reviewed possible causes of the fatality, applicable safety rules when closing an angle cock, and precautionary procedures for working around moving equipment. The railroad also conducted safety meetings with all employees to discuss the accident.



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